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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/581,457 | 06/01/2006 | Niaz Irekovich Akishev | 290319US41X PCT | 2174 |
| 22850 | 7590 | 10/14/2008 | | |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | EXAMINER GOFF II, JOHN L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1791 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 10/14/2008 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/581,457 | Applicant(s) AKISHEV ET AL. | |
| | Examiner John L. Goff | Art Unit 1791 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/1/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

3. Claim 1 recites the limitation "the blank" in line 2. There is insufficient antecedent basis for this limitation in the claim.

4. Claim 1 recites the limitation "the prepreg" in line 3. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 1 recites the limitation "the core ridges" in line 5. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 1 recites the limitation "the core relief" in line 7. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 1 requires "the final hardening of the applied binder is characterized by that the reinforcing material is impregnated with binder along the full surface of the blank, the heat supply for hardening of the binder in the obtained prepreg within the bound of said parts, and creation of conditions slowing down the process of hardening along the prepreg zones between said parts". The examiner interprets the language as requiring the final hardening to include the reinforcing material is impregnated with binder along the full surface of the blank before final

Art Unit: 1791

hardening and the heat used for the final hardening is at least supplied between the rigid parts.

However, it is not clear what is required by “creation of conditions slowing down the process of hardening along the prepreg zones between said parts”. It is interpreted that because it is required that heat is supplied between the rigid parts that this limitation requires the resin in the prepreg zones between the parts be hardened, i.e. conditions of slowed/stopped hardening.

Claim Rejections - 35 USC § 102/103

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1791

11. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Desyatov et al. (RU 2057647 and see also the abstract and applicants description on page 2 of the specification).

Desyatov discloses a method for production of a sandwich panel core from composites including providing a blank of reinforcing material, impregnating the blank with binder in discrete parts thus obtaining a prepreg, hardening the binder in the course of hot-pressing thereby obtaining a semifinished-blank in the form of a set of relatively rigid parts having the form of core ridges detached from one another for some distance, after-deforming the semifinished-blank to obtain a core relief with the required geometrics, impregnating prepreg zones between the rigid parts such that the reinforcing material is impregnated with binder along the full surface of the blank, and final hardening of the applied binder by supplying heat for hardening of the binder within the prepreg zones thereby stopping/slowing the process of hardening along the prepreg zones (See the abstract and applicants description on page 2 of the specification). Desyatov teaches the width of the prepreg zones between the parts having the form of the core ridges is provided in the course of hot-pressing and is not less than double the radius of the blank material bending at these parts when shaping the core.

It is noted Desyatov is considered to teach the reinforcing material is impregnated with binder along the full surface of the blank prior to final hardening otherwise the blank would not maintain the required geometry following final hardening. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made that impregnating the prepreg zones between the rigid parts result in binder along the full surface of the blank prior to final hardening such that the blank maintains the required geometry following final hardening.

Art Unit: 1791

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 04-244834 is exemplary of after-deforming after curing a prepreg to form rigid parts.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571)272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John L. Goff/
Primary Examiner, Art Unit 1791

Application/Control Number: 10/581,457

Page 6

Art Unit: 1791